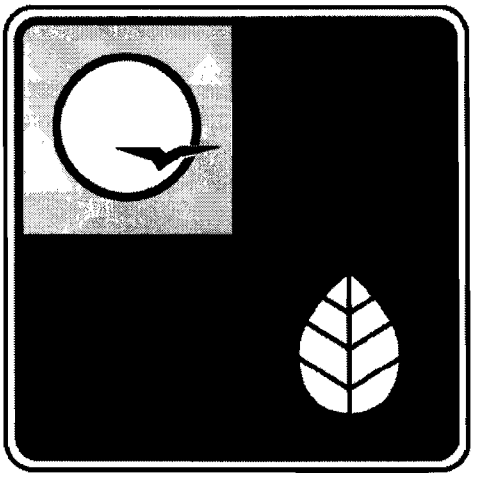

Missouri Department of Natural Resources
Air Pollution Control Program
2008 Monitoring Network Plan

June 27, 2008

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Introduction

The Ambient Air Quality Monitoring Network for the State of Missouri consists of State and Local Air Monitoring Stations (SLAMS) and Special Purpose Monitoring Stations with the intent to incorporate NCore sampling in the future. The Missouri Department of Natural Resources operates an extensive network of ambient air monitors to comply with the Clean Air Act and its amendments. 40 CFR 58.10 requires that states submit an annual monitoring network plan including any proposed network changes. With regard to SLAMS changes, approval by the Environmental Protection Agency (EPA) Regional Administrator is required.

The plan must contain the following information for each monitoring station in the network:

1. The Air Quality System (AQS) site identification number for existing stations.
2. The location, including the street address and geographical coordinates, for each monitoring station.
3. The sampling and analysis method used for each measured parameter.
4. The operating schedule for each monitor.
5. Any proposal to remove or move a monitoring station with in a period of 18 months following the plan submittal.
6. The monitoring objective and spatial scale of representativeness for each monitor.
7. The identification of any sites that are or are not suitable for comparison against the annual $PM_{2.5}$ National Ambient Air Quality Standard (NAAQS).
8. The Metropolitan Statistical Area (MSA), Core-Based Statistical Area, Combined Statistical Area or other area represented by the monitor.

Network Design

Appendix D to Part 58 establishes the design criteria for the ambient air monitoring network. The network is designed to meet three general objectives: provide air pollution data to the public in a timely manner, support compliance with ambient air quality standards and emissions strategy development, and support air pollution research studies.

Specific objectives for the monitoring sites are to determine the highest pollution concentrations in an area (peak), to measure typical concentrations in areas of high population density (population), to determine the impact of significant sources or source categories (source), to determine general background levels (background), and to determine the extent of regional pollutant transport among populated areas (transport). Minimum site requirements are provided for ozone and particulate

matter based on MSA population. There are no minimum site requirements for carbon monoxide, nitrogen dioxide, or sulfur dioxide. Minimum site requirements for lead only apply if violations of the lead standard have been recorded during the last two years.

Appendix E to Part 58 establishes the specific requirements for monitor/probe siting to insure that the ambient data represents the stated objectives and spatial scale. The requirements are pollutant/scale specific and involve horizontal/vertical placement.

$PM_{2.5}$ Standards

There is only one $PM_{2.5}$ sampler in Missouri that is not applicable for comparison to the annual NAAQS - Branch Street. It is a middle-scale site focused on a group of sources in the industrial riverfront area and is not neighborhood scale.

Proposed Changes to Network

1. Ozone

St. Louis Area Monitoring Network

The St. Louis MSA is in compliance with the minimum requirement for ozone monitoring. According to the 1998–2007 ozone data analysis, all current ozone sites in the St. Louis area are monitoring violations of the new National Ambient Air Quality Standard of .075 parts per million (ppm). (See map below). Design value sites for the area are at Orchard Farm and West Alton. Other ozone monitoring is at Foley, Maryland Heights, Margaretta, Blair Street, Sunset Hills, Pacific, and Arnold West, a new site.

Analysis of emissions data in relation to the above sites reveals that the general location of these sites is such that they are in or close proximity to areas that have high concentration of emission sources or larger sources (point, mobile, and area) or are located downwind of these areas. In addition, as shown by analysis of population, these sites are located primarily in densely populated areas and population in these areas is projected for future increases. Backward trajectory analysis has indicated that these sites are likely receptors of emission impacts from areas beyond Missouri including along the Ohio River Valley.

40 CFR 58.14(c) states that the Regional Administrator may approve for discontinuation any ozone SLAMS monitor which has shown attainment during the previous five years. None of these sites meet the criteria under the new NAAQS of .075 ppm. However, section 58.14 (c) also indicates that other requests

for discontinuation may be approved on a case-by-case basis if discontinuance does not compromise data collection needed for implementation of a NAAQS and if the requirements for appendix D continue to be met. Since the early 1990's the area has undergone a contraction and relocation of sampling which has resulted in a smaller network of 11 samplers in the MSA. Monitors at Breckenridge and Queeny Park were relocated to Maryland Heights and Pacific, and monitors at Ladue, St Ann, and Ferguson eliminated in St. Louis County, so that the only early site remaining is Sunset Hills. In St. Louis City, monitoring at South Broadway and River Des Peres was eliminated, and monitoring at Clark and Newstead sites were relocated to Blair Street and Margaretta. Sites at Orchard Farm and Foley have been worthy additions, showing a greater extent of the ozone problem related to the MSA, and providing more spatial coverage for the network.

Given the new NAAQS at .075 ppm, we have reevaluated the network with regard to sufficiency and redundancy. Based on the above, we must show that any change in the network does not compromise implementation of the NAAQS, that is, maintains a consistency with determination of NAAQS compliance in the area. Given the high design values at Orchard Farm, West Alton, Maryland Heights, and Foley, monitoring at these sites is necessary to maintain an understanding of area compliance in the counties of St. Charles, St. Louis, and Lincoln. Without any of these monitoring sites, it is not clear that we will continue to be able to discern future design values. Numbers of exceedances of the .085 standard design values, and >.085 peak episodes continue to confirm the tendency for highest ozone values to occur on a north and northwest trajectory from the downtown area.

Design values in the urban core are lower at the monitoring sites at Blair Street and Margaretta (still violations of the .075 NAAQS). Because it is planned to be an NCORE site, Blair Street will be required to maintain ozone sampling year-round. In looking at annual fluctuation in design values, the lowest in the last three years was in 2006 at the Blair Street and Margaretta sites, .076.

Monitoring in the southern part of the MSA verifies the need for monitor siting for southern episodes. These episodes occur with less but still significant frequency and provide validation that there are violations occurring to the south. Design values are lower, with the lowest design value in the Missouri side of the area at Pacific. Arnold and Sunset Hills design values are similar from year to year.

Kansas City Area Monitoring Network

The Kansas City area is also in compliance with the minimum requirement for ozone monitoring. All the current sites, Liberty, Rocky Creek, Trimble, Watkins

Mills State Park (WMSP), and Richards Gebauer-South (RGS), in the Kansas City area continue to be of importance in monitoring ozone levels and are therefore recommended for continuation.

Ozone data analysis has indicated violations of the standard have predominately been recorded at Liberty, Rocky Creek, and Trimble in the north. This is despite the sites' downward trends in design values prior to 2007. As noted in the episode analysis, these sites have been involved in recent ozone episodes. Of significance is that the measures of numbers of exceedances of the .085 standard, design values, and >.085 peak episodes continue to confirm the tendency for highest ozone values to occur on a north and northeast trajectory from the downtown area, as opposed to north and northwest in St. Louis.

Emission data analysis in relation to back trajectories shows that these sites are situated downwind of the emission centroid. The high frequency involvement of the sites in ozone episodes and the high number of peaks can all be attributed to this fact. This clearly points to the importance of retaining the sites for NAAQS compliance purpose.

The WMSP shows values in violation of the new ozone standard, although somewhat less. It also indicates the decreasing values off-line with the north-northeast downwind trajectory, which is also validated by sites in Kansas.

The location of the RG-South site is important to the network as a whole. RG-South is primarily located upwind of the metro area. It is also in violation of the new ozone standard, although just barely, but provides documentation of current levels to the south. Its location therefore helps determine ozone impacts in the area and before they enter the metro area for episodes when it is upwind, and also as a downwind indicator of concentrations during those episodes.

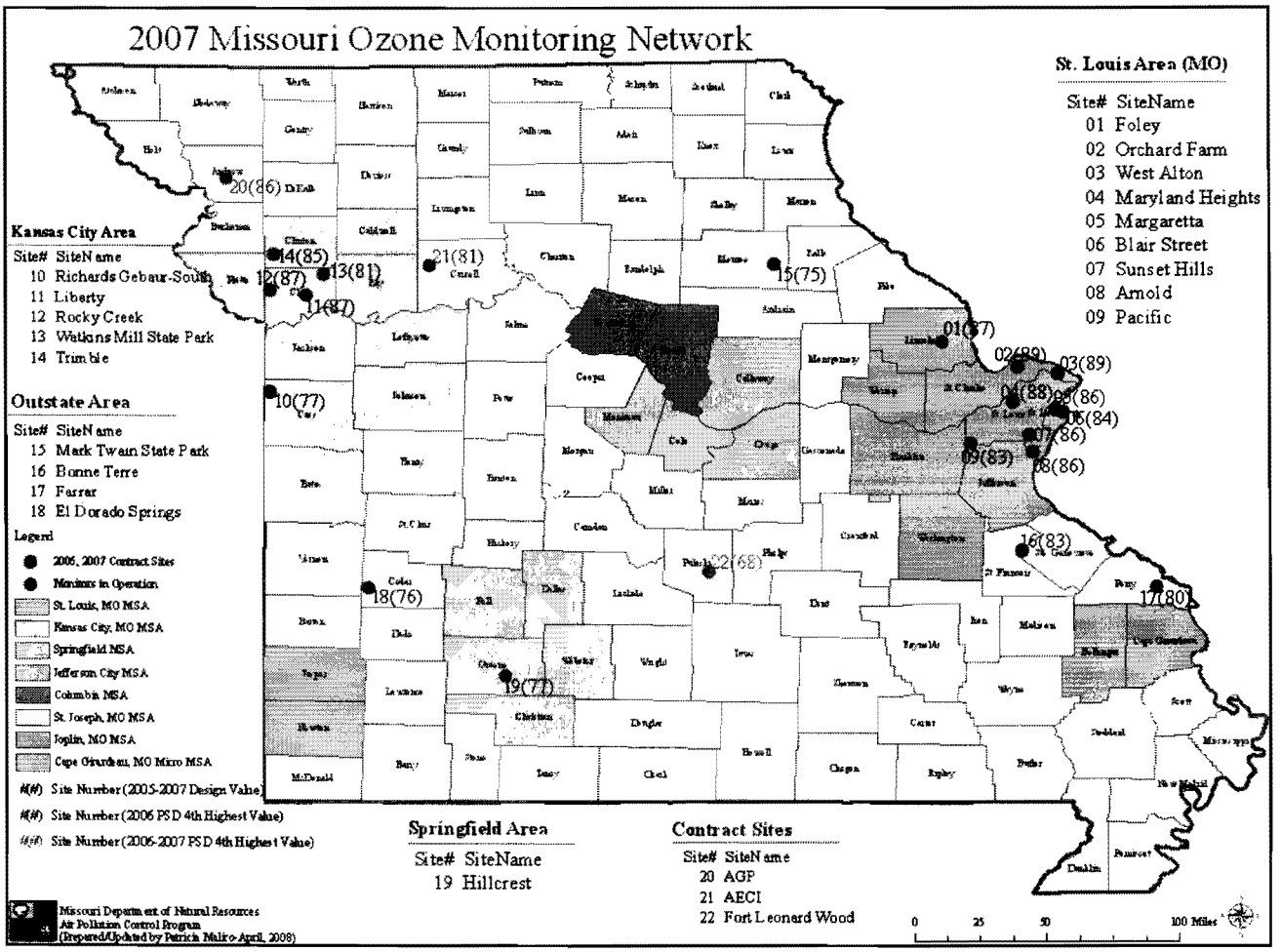
Springfield Area Monitoring Network

Springfield meets the minimum requirement for ozone monitoring with the addition of the new Fellows Lake site. Ozone day time summer wind and current emissions data analysis for the area indicated this location farther downwind of Volatile Organic Compounds (VOC) and Nitrogen Oxides (NOx) emission sources, whose emissions were carried by the predominately south-southwest winds would have a likelihood of generating higher ozone to the northeast, which has to this point occurred. While no data is presented here, given the minimal monitoring period, it has been noticed that there is some elevation of ozone values at Fellows Lake above the Hillcrest High School results.

Other Areas in the State

The recently revised ozone NAAQS provides impetus for additional ozone monitoring in several locations in the state. 40 CFR 58, Appendix D indicates that if design values are at greater than 85% of the standard in MSA greater than 50,000, then at least one ozone site is required. Current MSA's 50,000 and above where monitoring is not occurring include Joplin, St. Joseph, Jefferson City, and Columbia. Mapping of 2007 design values indicate rural areas of the state including El Dorado Springs and Mark Twain above or at the standard for 2007.

Analysis of 2006 ozone concentrations at the Ag Processing Prevention of Significant Deterioration (PSD) ozone site in Andrew County, just north of St. Joseph, and within the MSA, shows the fourth high 8-hour ozone average above the standard. Trajectory analysis of the peak day for the site shows winds passing over area of high emission concentration as they approach the site. The potential of high ozone concentrations therefore raise concerns of potential health impacts on population in the area. Population and emissions densities in these areas verify the need for ozone monitoring.



Based on the above information, the following ozone network changes are planned:

1. Given the low design values at Margaretta, its close proximity to Blair Street and it's redundancy in episode analysis, this monitor will be discontinued.

2. The Sunset Hills site shows values which are in violation of the standard, but is not a design value site, and is redundant in providing information on monitoring in the southern part of the area. It will be discontinued.

3. One ozone monitoring site will be added in the MSA's of Joplin, St. Joseph, Columbia, and Jefferson City. Each of these areas currently is unmonitored. The closest agency and PSD monitoring indicates the likelihood of values above the new standard. Point, mobile, and area source emissions are elevated above those occurring in most of the state, so that ozone levels appear likely to be higher than those at Mark Twain, or Eldorado Springs.

2. Particulate Matter

Van Brunt PM_{10} Monitoring Site Relocation

The current PM_{10} network for the Kansas City area meets the minimum requirement of two monitoring sites in an urban area with > 1,000,000 population having PM_{10} design values less than 80% of the NAAQS. The Van Brunt site is recommended for relocation. This site has monitored low particulate values over the years and is now comparable to rural levels at Mark Twain State Park at 38 ug/m^3 (Figure 1). It is located in an area with no nearby point sources and is 1/3 mile north of I-70 (Figure 2). The Code of Federal Regulations' sections dealing with PM_{10} network design indicates middle-scale sampling in population oriented areas as a desired objective. This site will be moved to a middle scale source orientated location. Some potential site locations may be near quarry operations given the potential for low level emissions that may impact residential or commercial areas nearby. Other source types will also be considered, however emissions from tall stacks are not considered to be of greatest concern, including Utility Boilers which will be excluded.

Potential locations are contained in the list following. These are point sources of $\geq$ 5 tons per year (tpy) in PM_{10} emissions. Priority is given to those areas that have a high concentration of point sources in high-populated areas. Relocation will ensure that the minimum requirement of two PM_{10} monitoring sites in the Kansas City area is still being met in low concentration MSA's, in accordance with 40 CFR Part 58 Appendix D.

Figure 1
Van Blunt 1995-2007
Mark Twain State Park 1995-2007

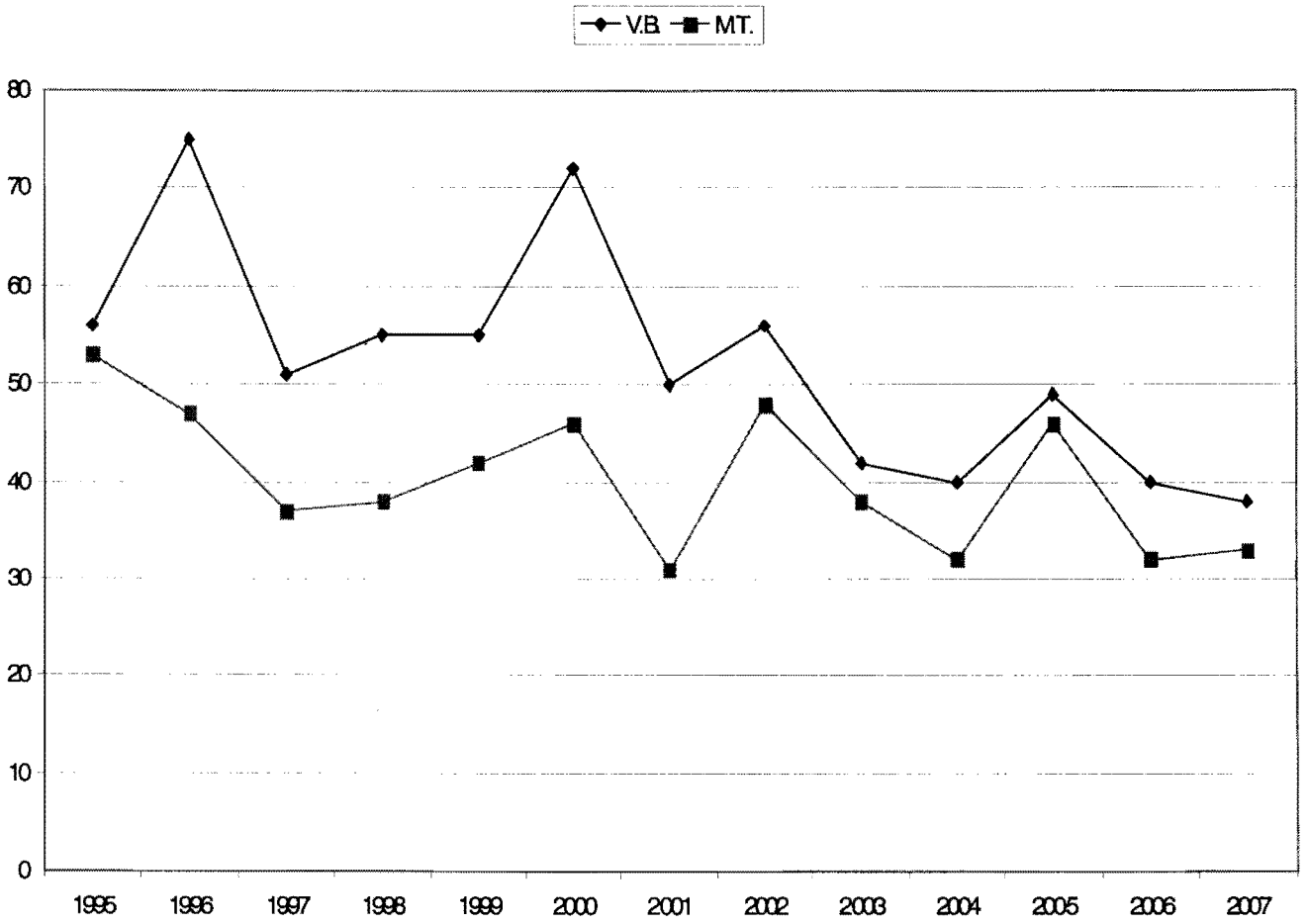


Figure 2

KANSAS CITY PM_{10} SOURCES >=5 TONS (tpy)

FACILITY	COUNTY	TONS
Lafarge North America Inc.	Jackson	190
National Starch & Chemical Co.	Clay	140
American Italian Pasta Co.	Clay	69
Buildex Inc.	Platt	60
Cargill Inc.	Jackson	48
Performance Roof Systems Inc.	Jackson	33
Fordyce Concrete Co. Inc.	Jackson	20
Hunt Martin Materials LLC	Platt	17
Superior Asphalt Co. Inc.	Clay	16
Little Blue Valley Sewer District	Jackson	15
Lafarge North America Inc.	Jackson	15
Hunt Martin Materials LLC	Platt	14
Caravan Ingredients Co.	Jackson	13
Limpus Quarries Inc.	Jackson	13
Lafarge North America Inc.	Jackson	13
Penny's Concrete Inc.	Jackson	12
General Mills Inc.	Jackson	12
Superior Asphalt Inc.	Jackson	11
Archer Daniels Midland Co.	Clay	10
Alliant Techsystems Inc.	Jackson	10
Lafarge North America Inc.	Jackson	09
Vance Brothers Inc	Jackson	08
APAC Missouri	Jackson	08
Allied Waste Industries Inc.	Jackson	08
Damon Pursell Construction Co.	Jackson	08
Show Me Ready Mix LLC	Jackson	07
Davis Paint Co.	Clay	07
Superior Bowen Asphalt Co. LLC	Jackson	07
Cook Composites and Polymers Co.	Clay	07
Superior Asphalt Portable Plant	Jackson	06
Platte County Ready Mix	Platt	06
Unilever	Jackson	06
Barber & Sons Aggregates	Jackson	06
Team Excavating LLC	Jackson	06
Superior Bowen Asphalt Co. LLC	Platt	05
Galament Inc.	Jackson	05
Hunt Martin Materials LLC	Clay	05

3. SO_2

Clarksville SO_2 monitoring was instituted to determine whether high concentrations of that pollutant were occurring. A site began sampling in 2005, with the following maximum values over the three year period:

Clarksville SO_2 Annual Maximum Values								
2005			2006			2007		
24 hr	3 hr	annual avg.	24 hr	3 hr	annual avg.	24 hr	3 hr	annual avg.
0.017	0.048	0.0031	0.054	0.137	0.0054	0.013	0.052	0.0028

Over the three years, maximum values have been considerably less than 1/2 of any SO_2 National Ambient Air Quality Standard, including 0.14 for the 24-hour standard, 0.5 for the 3-hour standard, and 0.03 for the annual arithmetic mean. For this reason, we will discontinue sampling at the site.

Network Description Components

Site Data

All ambient air monitoring sites are recorded in the EPA's AQS database. Data includes location data such as latitude & longitude.

AQS Site Code

The site code includes a numerical designation for state, county, and individual site. The state and county codes are assigned a number based on the alphabetical order of the state or county. Site numbers are assigned sequentially by date established in most counties. St. Louis County sites also have a division for municipality within St. Louis County.

Street Address

The official post office address of the lot where the monitors are located. Because not all sites are located in cities or towns, the street address is occasionally given as the intersection of the nearest streets or highways.

Geographical Coordinates

The coordinate system used by Missouri Department of Natural Resources is latitude and longitude.

Air Quality Control Region

Air Quality Control Region (AQCR) is defined by EPA and designates either urban regions, like St. Louis or Kansas City, or rural sections of a state, such as northeast or southwest Missouri.

AQCR	AQCR Name
070	Metropolitan St. Louis
094	Metropolitan Kansas City
137	Northern Missouri
138	SE Missouri
139	SW Missouri

Metropolitan Statistical Area

MSAs are defined by the U.S. Census Bureau.

MSA Code	MSA Name
0000	Not in a MSA
1740	Columbia, MO
3710	Joplin, MO
3760	Kansas City, MO-KS
7000	St. Joseph, MO
7040	St. Louis, MO-IL
7920	Springfield, MO

Monitor Data

Each monitor is designed to detect a specific chemical pollutant or group of related pollutants. A site may have one or many monitors and not all sites will have the same monitors.

Pollutant

The common name of the pollutant. "Criteria" pollutants are defined by statute in the Clean Air Act.

AQS Pollutant Code

Each pollutant has a specific numerical code to distinguish it from others. One monitor in St. Louis City uses a code of '00000' because the monitor detects an entire group of chemicals, volatile organic pollutants, which are too numerous to list individually.

Pollutant Code	Pollutant
00000	VOCs
12128	Lead
42101	Carbon Monoxide
42242	Mercury vapor
42401	Sulfur Dioxide
42402	Hydrogen Sulfide
42406	Sulfur Dioxide five-min
42602	Nitrogen Dioxide
42604	Ammonia
Pollutant Code	Pollutant
43502	Formaldehyde
44201	Ozone
45201	Benzene
45202	Toluene
61103	Resultant Wind Speed
61104	Resultant Wind Direct
62101	Outdoor Temperature
62107	Indoor Temperature
62201	Relative Humidity
63301	Solar Radiation
64101	Barometric Pressure
81102	PM_{10}
84313	Black Carbon
88101	$PM_{2.5}$ FRM
88500	$PM_{2.5}$ Tot Atmospheric
88501	$PM_{2.5}$ Raw Data
88502	$PM_{2.5}$ AQI/Speciation
88503	$PM_{2.5}$ Reference

POC

The Position Occurrence Code (POC) distinguishes between different monitors for the same pollutant, most often collocated monitors used for precision and quality assurance. For $PM_{2.5}$, different POCs are assigned to Federal Reference Method (FRM), collocated FRM, continuous, and speciation monitors.

Collocated

Collocated monitors are used for precision and quality assurance activities, and for redundancy for critical pollutants such as ozone.

Sampling Frequency

Sampling frequency varies for each pollutant, depending on the nature of the NAAQS standard and the technology used in the monitoring method. Most gaseous pollutants use continuous monitors and are averaged over one hour. Particulate pollutants are mostly filter-based and averaged over one day.

Scale of Representation

Each monitor is intended to represent an area with similar pollutant concentration. The scales range from only a few meters to many kilometers.

MIC Microscale - defines the concentration in air volumes associated with area dimensions ranging from several meters up to about 100 meters.

MID Middle - defines the concentration typical of areas up to several city blocks in size with dimensions ranging from about 100 meters to 0.5 kilometers.

NBR Neighborhood - defines concentrations within an extended area of a city that has relatively uniform land use with dimensions in the 0.5 to 4.0 kilometers.

URB Urban - defines an overall citywide condition with dimensions on the order of 4 to 50 kilometers.

REG Regional - defines air quality levels over areas having dimensions of 50 to hundreds of kilometers.

Monitoring Objective

Each monitor has a distinct objective such as providing real-time data for public awareness or use in determining compliance with regulations.

Objective Code	Objective
AQI	Public Information
COM	NAAQS Compliance
MET	Meteorological Data
RES	Research
STA	State Standard

Units

The physical terms used to quantify the pollutant concentration, such as parts per million or micrograms per cubic meter.

Unit Code	Unit Description
001	$\mu g/m^3$
007	parts per million
008	parts per billion
012	miles per hour
013	knots
014	degree, compass
015	degree Fahrenheit
017	degree Celcius
018	Langleys
019	percent humidity
022	inches Mercury
025	Langleys per minute
105	$\mu g/m^3$ LC
121	parts per million

Monitoring/Analytical Method

Each monitor relies on a scientific principle to determine the pollutant concentration, which is described by the sampling method. Each method code is specific for a particular pollutant; therefore, a three numeral code may be used for different methods for different pollutants.

Missouri 2008 Ambient Air Monitoring Network

City Utilities

James River South

AQS Site Number 29-077-0037

Latitude:	37.110000	***AQCR:***	139	SW Missouri
Longitude:	-93.251944	***MSA:***	7920	Springfield, MO
Elevation:				

Pollutant	***AQS Code***	***PO***	***Col***	***Freq***	***Scale***	***Obj***	***Unit***		***Method***	
Sulfur Dioxide	42401	2		H	MID	COM	007	ppm	060	Pulsed fluorescent

Wildwood Lane

AQS Site Number 29-077-0040

1234 Wildwood Lane, Springfield, MO 12435

Latitude:	37.108889	***AQCR:***	139	SW Missouri
Longitude:	-93.252778	***MSA:***	7920	Springfield, MO
Elevation:				

Pollutant	***AQS Code***	***PO***	***Col***	***Freq***	***Scale***	***Obj***	***Unit***		***Method***	
Sulfur Dioxide	42401	1		H	MID	COM	007	ppm	060	Pulsed fluorescent

Doe Run Buick

DRB # 5

AQS Site Number 29-093-0021

Latitude:	37.654167	***AQCR:***	138	SE Missouri
Longitude:	-91.130556	***MSA:***	0000	Not in an MSA
Elevation:				

Pollutant	***AQS Code***	***PO***	***Col***	***Freq***	***Scale***	***Obj***	***Unit***		***Method***	
Lead	12128	1		1/6	MID	COM	001	ug/m^3	090	Emission Spectra ICAP

DRB #1

AQS Site Number 29-093-0016

Latitude:	37.625278	***AQCR:***	138	SE Missouri
Longitude:	-91.129167	***MSA:***	0000	Not in an MSA
Elevation:				

Pollutant	***AQS Code***	***PO***	***Col***	***Freq***	***Scale***	***Obj***	***Unit***		***Method***	
Lead	12128	1	X	1/6	NBR	COM	001	ug/m^3	090	Emission Spectra ICAP

Doe Run Glover

DRG - Big Creek #5

AQS Site Number 29-093-0029

Latitude:	37.471667	***AQCR:***	138	SE Missouri
Longitude:	-90.689444	***MSA:***	0000	Not in an MSA
Elevation:				

Pollutant	***AQS Code***	***PO***	***Col***	***Freq***	***Scale***	***Obj***	***Unit***		***Method***	
Lead	12128	1		1/6	NBR	COM	001	ug/m^3	090	Emission Spectra ICAP

DRG - Post Office #2

AQS Site Number 29-093-0027

Latitude:	37.486111	***AQCR:***	138	SE Missouri
Longitude:	-90.69	***MSA:***	0000	Not in an MSA
Elevation:				

Pollutant	***AQS Code***	***PO***	***Col***	***Freq***	***Scale***	***Obj***	***Unit***		***Method***	
Lead	12128	1	X	1/6	NBR	COM	001	ug/m^3	090	Emission Spectra ICAP

Doe Run Herculaneum

Bluff

AQS Site Number 29-099-0011

Latitude: 38.268889 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.373333 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 520

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Lead	12128	1		1/3	NBR	COM	001	ug/m^3	113	Doe Run Spectra ICAP

Broad Street

AQS Site Number 29-099-0015

Broad Street, Herculaneum, MO, 63048

Latitude: 38.261667 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.379722 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 500

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Lead	12128	1		1/1	MID	COM	001	ug/m^3	113	Doe Run Spectra ICAP

Church Street

AQS Site Number xxxxxxx

Church Street, Herculaneum, MO, 63048

Latitude: 38.2586 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.3810 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 520

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Lead	12128	1	X	1/3	NBR	COM	001	ug/m^3	113	Doe Run Spectra ICAP

Circle Street

AQS Site Number 29-099-021

Circle Street, Herculaneum, MO, 63048

Latitude: 38.264833 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.377667 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 520

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Lead	12128	1		1/1	NBR	COM	001	ug/m^3	113	Doe Run Spectra ICAP

Dunklin

AQS Site Number 29-099-0005

1 Black Cat Drive, Herculaneum, MO, 63048

Latitude: 38.267222 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.379444 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 445

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Lead	12128	3		1/3	MID	COM	001	ug/m^3	113	Doe Run Spectra ICAP

Main Street (City Hall).

AQS Site Number 29-099-0004

Main Street, Herculaneum, MO, 63048

Latitude: 38.2633 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.3785 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 450

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Lead	12128	2		1/1	MID	COM	001	ug/m^3	113	Doe Run Spectra ICAP

Mott Street

AQS Site Number xxxxxxx

Mott Street, Herculaneum, MO, 63048

Latitude: 38.26303 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.37975 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 520

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Lead	12128	1	X	1/3	NBR	COM	001	ug/m^3	113	Doe Run Spectra ICAP

North Cross Street

AQS Site Number xxxxxxx

North Cross Street, Herculaneum, MO, 63048

Latitude: 38.2622 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.3813 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 520

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Lead	12128	1		1/1	NBR	COM	001	ug/m^3	113	Doe Run Spectra ICAP

Sherman

AQS Site Number 29-099-0013

Sherman Drive, Herculaneum, MO

Latitude: 38.273611 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.380000 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 450

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Lead	12128	1		1/6	NBR	COM	001	ug/m^3	113	Doe Run Spectra ICAP

South Cross Street

AQS Site Number xxxxxxx

South Cross Street, Herculaneum, MO, 63048

Latitude: 38.2604 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.3810 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 520

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Lead	12128	1		1/6	NBR	COM	001	ug/m^3	113	Doe Run Spectra ICAP

Missouri Department of Natural Resources' Environmental Services

Arnold West

AQS Site Number 29-099-0019

1709 Lonedell Drive, Arnold, MO 63010

Latitude: 38.448581 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.398436 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 625

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
$PM_{2.5}$ FRM	88101	1		1/3	NBR	COM	105	ug/m^3	118	R&P 2025 Sequential
Ozone	44201	1		H	NBR	COM	007	ppm	047	Ultra-violet Photometric
$PM_{2.5}$ AQI/Speciation	88502	5		1/3	NBR	RES	105	ug/m^3	850	R&P 2300 Seq Speciation
Resultant Wind Direct	61104	1		H	NBR	MET	014	deg	020	Vector Summation
Resultant Wind Speed	61103	1		H	NBR	MET	012	mph	020	Vector Summation
$PM_{2.5}$ AQI/Speciation	88502	4		H	NBR	AQI	105	ug/m^3	761	$PM_{2.5}$ VSCC FDMS
Indoor Temperature	62107	1		H	NBR	MET	017	deg C	013	Electronic Averaging
$PM_{2.5}$ AQI/Speciation	88502	3		H	NBR	AQI	105	ug/m^3	761	$PM_{2.5}$ VSCC FDMS
$PM_{2.5}$ Tot Atmospheric	88500	4		H	NBR	AQI	105	ug/m^3	761	$PM_{2.5}$ VSCC FDMS
Outdoor Temperature	62101	1		H	NBR	MET	015	deg F	040	Electronic Averaging
$PM_{2.5}$ Tot Atmospheric	88500	3		H	NBR	AQI	105	ug/m^3	761	$PM_{2.5}$ VSCC FDMS

Bonne Terre

AQS Site Number 29-186-0005

Smith Road & Overview Road

Latitude: 37.896944 ***AQCR:*** 138 SE Missouri

Longitude: -90.422222 ***MSA:*** 0000 Not in an MSA

Elevation: 840

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Resultant Wind Direct	61104	1		H	REG	MET	014	deg	020	Vector Summation
Ozone	44201	1		H	REG	COM	007	ppm	047	Ultra-violet Photometric
Resultant Wind Speed	61103	1		H	REG	MET	012	mph	020	Vector Summation
$PM_{2.5}$ AQI/Speciation	88502	5		1/6	REG	RES	105	ug/m^3	850	R&P 2300 Seq Speciation
$PM_{2.5}$ Tot Atmospheric	88500	3		H	REG	COM	105	ug/m^3	760	$PM_{2.5}$ SCC FDMS
Solar Radiation	63301	1		H	REG	MET	025	Langle	011	Pyranometer
Indoor Temperature	62107	1		H	REG	MET	017	deg C	013	Electronic Averaging
$PM_{2.5}$ AQI/Speciation	88502	3		H	REG	COM	105	ug/m^3	760	$PM_{2.5}$ SCC
Nitrogen Dioxide	42602	1		H	REG	COM	007	ppm	074	Chemiluminescence

Carthage

AQS Site Number 29-097-0003

530 Juniper, Carthage, MO,

Latitude: 37.21 ***AQCR:*** 139 SW Missouri

Longitude: -94.307778 ***MSA:*** 3710 Joplin, MO

Elevation: 1002

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
PM_{10} - LC	85101	1		H	MID	COM	105	ug/m^3	127	R&P 2025 Sequential
PM_{10}	81102	3		H	MID	COM	001	ug/m^3	079	R&P SA246B TEOM
Resultant Wind Direct	61104	1		H	NBR	MET	014	deg	020	Vector Summation
Indoor Temperature	62107	1		H	NBR	MET	017	deg C	013	Electronic Averaging
Resultant Wind Speed	61103	1		H	NBR	MET	012	mph	020	Vector Summation
PM_{10}	81102	1		1/6	MID	COM	001	ug/m^3	127	R&P 2025 Sequential

Columbia MSA ozone site

AQS Site Number xxxxxxx

Columbia MSA

Latitude: 000000000 ***AQCR:*** xxx xxxxxxxxxxxxxxxx

Longitude: 000.000000 ***MSA:*** xxxx xxxxxxxxxxxx

Elevation: 0000

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Ozone	44201	1		H	NBR	COM	007	ppm	047	Ultra-violet Photometric
Resultant Wind Direct	61104	1		H	NBR	MET	014	deg	020	Vector Summation
Resultant Wind Speed	61103	1		H	NBR	MET	012	mph	020	Vector Summation

El Dorado Springs

AQS Site Number 29-039-0001

Highway 97 & Barnes Road

Latitude: 37.695833 ***AQCR:*** 139 SW Missouri

Longitude: -94.0375 ***MSA:*** 0000 Not in an MSA

Elevation: 965

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
$PM_{2.5}$ FRM	88101	1		1/3	REG	COM	105	ug/m^3	118	R&P 2025 Sequential
Ozone	44201	1		H	REG	COM	007	ppm	047	Ultra-violet Photometric
Outdoor Temperature	62101	1		H	REG	MET	015	deg F	040	Electronic Averaging
Resultant Wind Speed	61103	1		H	REG	MET	012	mph	020	Vector Summation
Resultant Wind Direct	61104	1		H	REG	MET	014	deg	020	Vector Summation
$PM_{2.5}$ AQI/Speciation	88502	3		H	REG	AQI	105	ug/m^3	761	$PM_{2.5}$ VSCC FDMS
Indoor Temperature	62107	1		H	REG	MET	017	deg C	013	Electronic Averaging
$PM_{2.5}$ AQI/Speciation	88502	5		1/3	REG	RES	105	ug/m^3	707	IMPROVE Protocol
$PM_{2.5}$ Tot Atmospheric	88500	3		H	REG	AQI	105	ug/m^3	761	$PM_{2.5}$ VSCC FDMS

Farrar

AQS Site Number 29-157-0001

Highway C & Farm Road 342, Farrar, MO,

Latitude: 37.6992 ***AQCR:*** 138 SE Missouri

Longitude: -89.6909 ***MSA:*** 0000 Not in an MSA

Elevation: 497

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Resultant Wind Direct	61104	1		H	NBR	MET	014	deg	020	Vector Summation
Resultant Wind Speed	61103	1		H	NBR	MET	012	mph	020	Vector Summation
Indoor Temperature	62107	1		H	NBR	MET	017	deg C	013	Electronic Averaging
Ozone	44201	1		H	NBR	COM	007	ppm	047	Ultra-violet Photometric

Foley

AQS Site Number 29-113-0003

#7 Wild Horse, Foley, MO,

Latitude: 39.0447 ***AQCR:*** 137 Northern Missouri

Longitude: -90.8647 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 715

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Indoor Temperature	62107	1		H	NBR	MET	017	deg C	013	Electronic Averaging
Resultant Wind Direct	61104	1		H	NBR	MET	014	deg	020	Vector Summation
Ozone	44201	1		H	NBR	COM	007	ppm	047	Ultra-violet Photometric
Resultant Wind Speed	61103	1		H	NBR	MET	012	mph	020	Vector Summation

Green City

AQS Site Number 29-171-0002

Latitude: 00.00000 ***AQCR:*** 137 Northern Missouri

Longitude: -00.00000 ***MSA:*** 0000 Not in an MSA

Elevation: 0000

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Indoor Temperature	62107	1		H	NBR	MET	017	deg C	013	Electronic Averaging
Ammonia	42604	1		H	NBR	STA	007	ppm	051	TECO17
Resultant Wind Speed	61103	1		H	NBR	MET	012	mph	020	Vector Summation
Resultant Wind Direct	61104	1		H	NBR	MET	014	deg	020	Vector Summation
Hydrogen Sulfide	42402	1		H	NBR	STA	007	ppm	020	Pulsed fluorescent

Herculaneum, Bluff *f*

AQS Site Number 29-099-0011

Latitude:	38.268889	***AQCR:***	070	Metropolitan St. Louis
Longitude:	-90.373333	***MSA:***	7040	St. Louis, MO-IL
Elevation:	520			

Pollutant	***AQS Code***	***PO***	***Col***	***Freq***	***Scale***	***Obj***	***Unit***		***Method***	
Lead	12128	2		1/3	NBR	COM	001	ug/m^3	085	Emission Spectra ICAP

Herculaneum, Broad Street

AQS Site Number 29-099-0015

Broad Street, Herculaneum, MO, 63048

Latitude:	38.261667	***AQCR:***	070	Metropolitan St. Louis
Longitude:	-90.379722	***MSA:***	7040	St. Louis, MO-IL
Elevation:	500			

Pollutant	***AQS Code***	***PO***	***Col***	***Freq***	***Scale***	***Obj***	***Unit***		***Method***	
Lead	12128	2		1/1	MID	COM	001	ug/m^3	085	Emission Spectra ICAP

Herculaneum, Circle Street

AQS Site Number 29-099-0021

Circle Street, Herculaneum, MO, 63048

Latitude:	38.264833	***AQCR:***	070	Metropolitan St. Louis
Longitude:	-90.377667	***MSA:***	7040	St. Louis, MO-IL
Elevation:	459			

Pollutant	***AQS Code***	***PO***	***Col***	***Freq***	***Scale***	***Obj***	***Unit***		***Method***	
Lead	12128	1		1/1	NBR	COM	001	ug/m^3	085	Emission Spectra ICAP

Herculaneum, Dunklin

AQS Site Number 29-099-0005

1 Black Cat Drive, Herculaneum, MO, 63048

Latitude:	38.267222	***AQCR:***	070	Metropolitan St. Louis
Longitude:	-90.379444	***MSA:***	7040	St. Louis, MO-IL
Elevation:	445			

Pollutant	***AQS Code***	***PO***	***Col***	***Freq***	***Scale***	***Obj***	***Unit***		***Method***	
Lead	12128	1	X	1/3	NBR	COM	001	ug/m^3	085	Emission Spectra ICAP

Herculaneum, Main Street

AQS Site Number 29-099-0004

Main Street, Herculaneum, MO, 63048

Latitude:	38.2633	***AQCR:***	070	Metropolitan St. Louis
Longitude:	-90.3785	***MSA:***	7040	St. Louis, MO-IL
Elevation:	450			

Pollutant	***AQS Code***	***PO***	***Col***	***Freq***	***Scale***	***Obj***	***Unit***		***Method***	
Lead	12128	1		1/1	MID	COM	001	ug/m^3	085	Emission Spectra ICAP

Herculaneum, Main Street — ***AQS Site Number*** 29-099-0004

Indoor Temperature	62107	1	H	NBR	MET	017	deg C	013	Electronic Averaging
Sulfur Dioxide	42401	1	H	MID	COM	007	ppm	060	Pulsed fluorescent
Resultant Wind Direct	61104	1	H	NBR	MET	014	deg	020	Vector Summation
Sulfur Dioxide 5-min	42406	1	H	MID	COM	007	ppm	060	Pulsed Fluorescent
Resultant Wind Speed	61103	1	H	NBR	MET	012	mph	020	Vector Summation

Jefferson City MSA ozone site — ***AQS Site Number*** xxxxxxx

Jefferson City MSA

Latitude: 000000000 ***AQCR:*** xxx xxxxxxxxxxxxxxxx

Longitude: 000.000000 ***MSA:*** xxxx xxxxxxxxxxxx

Elevation: 0000

Pollutant	***AQS Code***	***PO***	***Col***	***Freq***	***Scale***	***Obj***	***Unit***		***Method***	
Ozone Photometric	44201	1		H	NBR	COM	007	ppm	047	Ultra-violet

Joplin MSA ozone site — ***AQS Site Number*** xxxxxxx

Joplin MSA

Latitude: 000000000 ***AQCR:*** xxx xxxxxxxxxxxxxxxx

Longitude: 000.000000 ***MSA:*** xxxx xxxxxxxxxxxx

Elevation: 0000

Pollutant	***AQS Code***	***PO***	***Col***	***Freq***	***Scale***	***Obj***	***Unit***		***Method***	
Ozone	44201	1		H	NBR	COM	007	ppm	047	Ultra-violet Photometric

Kansas City MSA PM_{10} site — ***AQS Site Number*** xxxxxxx

Kansas City MSA

Latitude: 000000000 ***AQCR:*** xxx xxxxxxxxxxxxxxxx

Longitude: 000.000000 ***MSA:*** xxxx xxxxxxxxxxxx

Elevation: 0000

Pollutant	***AQS Code***	***PO***	***Col***	***Freq***	***Scale***	***Obj***	***Unit***		***Method***	
PM_{10} - LC	85101	1		1/1	NBR	COM	105	ug/m^3	127	R&P 2025 Sequential
PM_{10}	81102	1		1/1	NBR	COM	001	ug/m^3	127	R&P 2025 Sequential

Liberty

AQS Site Number 29-047-0005

116th, Liberty, MO

Latitude: 39.303056 ***AQCR:*** 094 Metropolitan Kansas City

Longitude: -94.376389 ***MSA:*** 3760 Kansas City, MO-KS

Elevation: 930

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Nitrogen Dioxide	42602	1		H	URB	COM	007	ppm	074	Chemiluminescence
$PM_{2.5}$ Tot Atmospheric	88500	3		H	NBR	AQI	105	ug/m^3	761	$PM_{2.5}$ VSCC FDMS
$PM_{2.5}$ AQI/Speciation	88502	5		1/3	NBR	RES	105	ug/m^3	850	R&P 2300 Seq Speciation
$PM_{2.5}$ FRM	88101	1		1/3	NBR	COM	105	ug/m^3	118	R&P 2025 Sequential
Solar Radiation	63301	1		H	URB	MET	025	Langle	011	Pyranometer
Outdoor Temperature	62101	1		H	URB	MET	015	deg F	040	Electronic Averaging
Ozone	44201	1		H	NBR	COM	007	ppm	047	Ultra-violet Photometric
$PM_{2.5}$ AQI/Speciation	88502	3		H	NBR	AQI	105	ug/m^3	761	$PM_{2.5}$ VSCC FDMS
Indoor Temperature	62107	1		H	URB	MET	017	deg C	013	Electronic Averaging
Resultant Wind Speed	61103	1		H	URB	MET	012	mph	020	Vector Summation
Resultant Wind Direct	61104	1		H	URB	MET	014	deg	020	Vector Summation

Mark Twain State Park

AQS Site Number 29-137-0001

Highways V & 107, Mark Twain State Park, MO

Latitude: 39.473056 ***AQCR:*** 137 Northern Missouri

Longitude: -91.789167 ***MSA:*** 0000 Not in an MSA

Elevation: 714

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Indoor Temperature	62107	1		H	REG	MET	017	deg C	013	Electronic Averaging
Sulfur Dioxide 5-min	42406	1		H	NBR	COM	007	ppm	060	Pulsed Fluorescent
Ozone	44201	1		H	REG	COM	007	ppm	047	Ultra-violet Photometric
Resultant Wind Speed	61103	1		H	REG	MET	012	mph	020	Vector Summation
PM_{10}	81102	1		1/6	REG	COM	001	ug/m^3	127	R&P 2025 Sequential
Sulfur Dioxide	42401	1		H	NBR	COM	007	ppm	060	Pulsed fluorescent
PM_{10} - LC	85101	1		1/6	REG	COM	105	ug/m^3	127	R&P 2025 Sequential
Resultant Wind Direct	61104	1		H	REG	MET	014	deg	020	Vector Summation

Mercer

AQS Site Number 29-129-0001

Latitude: 40.56 ***AQCR:*** 137 Northern Missouri

Longitude: -93.418333 ***MSA:*** 0000 Not in an MSA

Elevation: 1060

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Indoor Temperature	62107	1		H	NBR	MET	017	deg C	013	Electronic Averaging
Resultant Wind Direct	61104	1		H	NBR	MET	014	deg	020	Vector Summation
Hydrogen Sulfide	42402	1		H	MID	STA	007	ppm	020	Pulsed fluorescent
Resultant Wind Speed	61103	1		H	NBR	MET	012	mph	020	Vector Summation
Ammonia	42604	1		H	MID	STA	007	ppm	051	TECO17

Mound Street

AQS Site Number 29-510-0087

1716 N. 2nd Street, St. Louis, MO,

Latitude: 38.642444 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.185583 ***MSA:*** 7040 St. Louis, MO-IL

Elevation:

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Resultant Wind Speed	61103	1		H	MID	MET	012	mph	020	Vector Summation
Resultant Wind Direct	61104	1		H	MID	MET	014	deg	020	Vector Summation
Benzene	45201	1		H	MID	RES	008	ppb	157	OPSIS AR500
Mercury vapor	42242	1		H	MID	RES	121	ppt	157	OPSIS AR500
Formaldehyde	43502	1		H	MID	RES	008	ppb	157	OPSIS AR500
Toluene	45202	1		H	MID	RES	008	ppb	157	OPSIS AR500

Oakville

AQS Site Number 29-189-0015

Baumgartner Road

Latitude: 00.000000 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -00.000000 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 000

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
$PM_{2.5}$ FRM	88101	1		1/1	NBR	COM	105	ug/m^3	118	R&P 2025 Sequential
Resultant Wind Speed	61103	1		H	NBR	MET	012	mph	020	Vector Summation
Resultant Wind Direct	61104	1		H	NBR	MET	014	deg	020	Vector Summation

Orchard Farm

AQS Site Number 29-183-1004

2165 Highway V, St. Charles, MO, 63301

Latitude: 38.902222 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.446944 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 441

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Indoor Temperature	62107	1		H	NBR	MET	017	deg C	013	Electronic Averaging
Ozone	44201	1		H	URB	COM	007	ppm	047	Ultra-violet Photometric

RG - South

AQS Site Number 29-037-0003

1802 East 203 Street, Belton, MO,

Latitude: 38.770278 ***AQCR:*** 094 Metropolitan Kansas City

Longitude: -94.58 ***MSA:*** 3760 Kansas City, MO-KS

Elevation: 1072

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Indoor Temperature	62107	1		H	URB	MET	017	deg C	013	Electronic Averaging
$PM_{2.5}$ FRM	88101	1		1/3	NBR	COM	105	ug/m^3	118	R&P 2025 Sequential
Resultant Wind Speed	61103	1		H	URB	MET	012	mph	020	Vector Summation
Ozone	44201	1		H	NBR	COM	007	ppm	047	Ultra-violet Photometric
Resultant Wind Direct	61104	1		H	URB	MET	014	deg	020	Vector Summation

Rocky Creek

AQS Site Number 29-047-0006

13131 Highway 169 North East, Kansas City, MO

Latitude: 39.3322 ***AQCR:*** 094 Metropolitan Kansas City

Longitude: -94.5806 ***MSA:*** 3760 Kansas City, MO-KS

Elevation: 983

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Resultant Wind Speed	61103	1		H	URB	MET	012	mph	020	Vector Summation
Resultant Wind Direct	61104	1		H	URB	MET	014	deg	020	Vector Summation
Ozone	44201	1		H	NBR	COM	007	ppm	047	Ultra-violet Photometric

St. Genevieve

AQS Site Number 29-186-0006

Latitude: 37.967222 ***AQCR:*** 138 SE Missouri

Longitude: -90.051111 ***MSA:*** 0000 Not in an MSA

Elevation: 456

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
$PM_{2.5}$ FRM	88101	1		1/3	NBR	COM	105	ug/m^3	118	R&P 2025 Sequential

St. Joseph MSA ozone site

AQS Site Number xxxxxxx

Joplin MSA

Latitude: 000000000 ***AQCR:*** xxx xxxxxxxxxxxxxxxx

Longitude: 000.000000 ***MSA:*** xxxx xxxxxxxxxxxx

Elevation: 0000

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Ozone	44201	1		H	NBR	COM	007	ppm	047	Ultra-violet Photometric
Resultant Wind Direct	61104	1		H	NBR	MET	014	deg	020	Vector Summation
Resultant Wind Speed	61103	1		H	NBR	MET	012	mph	020	Vector Summation

St. Joseph Pump Station

AQS Site Number 29-021-0005

South Highway 759, St. Joseph, MO

Latitude: 39.741667 ***AQCR:*** 094 Metropolitan Kansas City

Longitude: -94.858333 ***MSA:*** 7000 St. Joseph, MO

Elevation: 818

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
PM_{10}	81102	1	X	1/3	NBR	COM	001	ug/m^3	127	R&P 2025 Sequential
$PM_{2.5}$ AQI/Speciation	88502	3		H	NBR	AQI	105	ug/m^3	760	$PM_{2.5}$ SCC
PM_{10} - LC	85101	1		1/3	NBR	COM	105	ug/m^3	127	R&P 2025 Sequential
$PM_{2.5}$ Tot Atmospheric	88500	3		H	NBR	AQI	105	ug/m^3	760	$PM_{2.5}$ SCC FDMS
Outdoor Temperature	62101	1		H	NBR	MET	015	deg F	040	Electronic Averaging
$PM_{2.5}$ FRM	88101	1		1/3	NBR	COM	105	ug/m^3	118	R&P 2025 Sequential

Trimble

AQS Site Number 29-049-0001

7536 SW O Highway,

Latitude: 39.5306 ***AQCR:*** 137 Northern Missouri

Longitude: -94.556 ***MSA:*** 3760 Kansas City, MO-KS

Elevation: 1020

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Ozone	44201	1		H	NBR	COM	007	ppm	047	Ultra-violet Photometric
Indoor Temperature	62107	1		H	URB	MET	017	deg C	013	Electronic Averaging
Resultant Wind Direct	61104	1		H	URB	MET	014	deg	020	Vector Summation
Resultant Wind Speed	61103	1		H	URB	MET	012	mph	020	Vector Summation

Troost

AQS Site Number 29-095-0034

724 Troost, Kansas City, MO,

Latitude: 39.104722 ***AQCR:*** 094 Metropolitan Kansas City

Longitude: -94.570556 ***MSA:*** 3760 Kansas City, MO-KS

Elevation: 900

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Outdoor Temperature	62101	1		H	NBR	MET	015	deg F	040	Electronic Averaging
$PM_{2.5}$ Tot Atmospheric	88500	3		H	NBR	AQI	105	ug/m^3	760	$PM_{2.5}$ SCC FDMS
$PM_{2.5}$ FRM	88101	1	X	1/3	NBR	COM	105	ug/m^3	118	R&P 2025 Sequential
Nitrogen Dioxide	42602	1		H	URB	COM	007	ppm	074	Chemiluminescence
Indoor Temperature	62107	1		H	NBR	MET	017	deg C	013	Electronic Averaging
PM_{10} - LC	85101	1		1/6	NBR	COM	105	ug/m^3	127	R&P 2025 Sequential
PM_{10}	81102	1		1/6	NBR	COM	001	ug/m^3	127	R&P 2025 Sequential
Sulfur Dioxide	42401	1		H	MID	COM	007	ppm	060	Pulsed fluorescent
$PM_{2.5}$ AQI/Speciation	88502	3		H	NBR	AQI	105	ug/m^3	760	$PM_{2.5}$ SCC

Watkins Mill State Park

AQS Site Number 29-047-0003

Watkins Mill Road

Latitude: 39.416667 ***AQCR:*** 094 Metropolitan Kansas City

Longitude: -94.283333 ***MSA:*** 3760 Kansas City, MO-KS

Elevation: 987

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Resultant Wind Speed	61103	1		H	URB	MET	012	mph	020	Vector Summation
Resultant Wind Direct	61104	1		H	URB	MET	014	deg	020	Vector Summation
Ozone	44201	1		H	NBR	COM	007	ppm	047	Ultra-violet Photometric
Indoor Temperature	62107	1		H	URB	MET	017	deg C	013	Electronic Averaging

West Alton

AQS Site Number 29-183-1002

Highway 94, West Alton, MO

Latitude: 38.8725 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.226389 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 425

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Solar Radiation	63301	1		H	NBR	MET	025	Langle	011	Pyranometer
Nitrogen Dioxide	42602	1		H	URB	COM	007	ppm	074	Chemiluminescence

West Alton

AQS Site Number 29-183-1002

Highway 94, West Alton, MO

Resultant Wind Speed	61103	1	H	NBR	MET	012	mph	020	Vector Summation
Indoor Temperature	62107	1	H	NBR	MET	017	deg C	013	Electronic Averaging
Outdoor Temperature	62101	1	H	NBR	MET	015	deg F	040	Electronic Averaging
Resultant Wind Direct	61104	1	H	NBR	MET	014	deg	020	Vector Summation
Ozone	44201	1	H	URB	COM	007	ppm	047	Ultra-violet Photometric

Springfield

Fellows Lake

AQS Site Number 29-077-0042

4208 E Farm Road 66, Springfield, MO 65803

Latitude: 37.319444 ***AQCR:*** 139 SW Missouri

Longitude: -93.204444 ***MSA:*** 7920 Springfield, MO

Elevation: 1346

Pollutant	***AQS Code***	***PO***	***Col***	***Freq***	***Scale***	***Obj***	***Unit***		***Method***
Resultant Wind Speed	61103	1		H	URB	MET	012	mph	020 Vector Summation
Resultant Wind Direct	61104	1		H	URB	MET	014	deg	020 Vector Summation
Ozone	44201	1		H	NBR	COM	007	ppm	047 Ultra-violet Photometric

Hillcrest High School

AQS Site Number 29-077-0036

3319 N. Grant, Springfield, MO,

Latitude: 37.261944 ***AQCR:*** 139 SW Missouri

Longitude: -93.298056 ***MSA:*** 7920 Springfield, MO

Elevation: 1345

Pollutant	***AQS Code***	***PO***	***Col***	***Freq***	***Scale***	***Obj***	***Unit***		***Method***
Ozone	44201	1		H	NBR	COM	007	ppm	047 Ultra-violet Photometric
Nitrogen Dioxide	42602	1		H	URB	COM	007	ppm	074 Chemiluminescence

Missouri State University

AQS Site Number 29-077-0032

Missouri State University, Springfield, MO,

Latitude: 37.202578 ***AQCR:*** 139 SW Missouri

Longitude: -93.283333 ***MSA:*** 7920 Springfield, MO

Thursday, May 22, 2008

Elevation:

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
PM_{10}	81102	1	X	1/6	NBR	COM	001	ug/m^3	062	Hi-vol wedding inlet
Carbon Monoxide	42101	1		H	MID	COM	007	ppm	054	Non-dispersive Infrared
$PM_{2.5}$ Tot Atmospheric	88500	1		H	NBR	AQI	105	ug/m^3	000	Sharp
Sulfur Dioxide	42401	1		H	NBR	COM	007	ppm	060	Pulsed fluorescent
$PM_{2.5}$ FRM	88101	1	X	1/3	NBR	COM	105	ug/m^3	118	R&P 2025 Sequential

South Charleston

AQS Site Number 29-077-0026

5012 South Charleston, Springfield, MO,

Latitude: 37.128333 ***AQCR:*** 139 SW Missouri

Longitude: -93.261667 ***MSA:*** 7920 Springfield, MO

Elevation:

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Sulfur Dioxide	42401	1		H	NBR	COM	007	ppm	060	Pulsed fluorescent

St. Louis City

Blair Street

AQS Site Number 29-510-0085

3247 Blair Street, St. Louis, MO,

Latitude: 38.656436 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.198661 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 431

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Resultant Wind Direct	61104	1		H	NBR	MET	014	deg	020	Vector Summation
$PM_{2.5}$ AQI/Speciation	88502	6		1/3	NBR	RES	105	ug/m^3	810	METONE SASS
$PM_{2.5}$ Raw Data	88501	3		H	NBR	AQI	105	ug/m^3	723	$PM_{2.5}$ WINS w/o corr
Solar Radiation	63301	1		H	NBR	MET	025	Langle	011	Pyranometer
Resultant Wind Speed	61103	1		H	NBR	MET	012	mph	020	Vector Summation
Ozone	44201	1		H	NBR	COM	007	ppm	087	Ultra-violet Absorption
Carbon Monoxide	42101	1		H	MID	COM	007	ppm	054	Non-dispersive Infrared
VOCs	00000	1		1/6	NBR	RES	008	ppb	T15	SUMMA cannister TO-15
$PM_{2.5}$ AQI/Speciation	88502	3		H	NBR	AQI	105	ug/m^3	724	$PM_{2.5}$ WINS w corr factor
Black Carbon	84313	1		H	NBR	RES	001	ug/m^3	862	Aethelometer
PM_{10}	81102	1	X	1/6	NBR	COM	001	ug/m^3	064	Hi-Vol SA/GMW-321-B
$PM_{2.5}$ FRM	88101	1	X	1/1	NBR	COM	105	ug/m^3	118	R&P 2025 Sequential

Branch Street

AQS Site Number 29-510-0093

100 Branch Street, St. Louis, MO,

Latitude: 38.653716 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.186816 ***MSA:*** 7040 St. Louis, MO-IL

Elevation:

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
$PM_{2.5}$ FRM	88101	1		1/3	NBR	COM	105	ug/m^3	118	R&P 2025 Sequential
Resultant Wind Speed	61103	1		H	NBR	MET	012	mph	020	Vector Summation
PM_{10}	81102	3		H	MID	COM	001	ug/m^3	079	R&P SA246B TEOM
Resultant Wind Direct	61104	1		H	NBR	MET	014	deg	020	Vector Summation

Hall Street

AQS Site Number 29-510-0088

6204 Hall Street, St. Louis, MO,

Latitude: 38.69075 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.209306 ***MSA:*** 7040 St. Louis, MO-IL

Elevation:

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
PM_{10}	81102	1		H	MID	COM	001	ug/m^3	079	R&P SA246B TEOM

Margaretta

AQS Site Number 29-510-0086

4520 Margaretta Street, Louis, MO,

Latitude: 38.672222 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.238889 ***MSA:*** 7040 St. Louis, MO-IL

Elevation:

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Sulfur Dioxide	42401	1		H	NBR	COM	007	ppm	039	Ultra-violet stimulated
Nitrogen Dioxide	42602	1		H	URB	COM	007	ppm	074	Chemiluminescence
Carbon Monoxide	42101	1		H	MID	COM	007	ppm	054	Non-dispersive Infrared
PM_{10}	81102	1		1/6	NBR	COM	001	ug/m^3	064	Hi-vol SA/GMW-321-B

Mound Street

AQS Site Number 29-510-0087

1716 N. 2nd Street, St. Louis, MO,

Latitude: 38.642444 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.185583 ***MSA:*** 7040 St. Louis, MO-IL

Elevation:

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
$PM_{2.5}$ FRM	88101	1		1/1	NBR	COM	105	ug/m^3	118	R&P 2025 Sequential
PM_{10}	81102	1		1/6	MID	COM	001	ug/m^3	064	Hi-vol SA/GMW-321-B

South Broadway

AQS Site Number 29-510-0007

8227 South Broadway, St. Louis, MO,

Latitude: 38.5425 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.263611 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 485

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
$PM_{2.5}$ FRM	88101	1		1/1	NBR	COM	105	ug/m^3	118	R&P 2025 Sequential
Sulfur Dioxide	42401	1		H	NBR	COM	007	ppm	039	Ultra-violet stimulated

St. Louis County

Clayton Animal Shelter

AQS Site Number 29-189-2003

77 Hunter Avenue, Clayton, MO,

Latitude: 38.649722 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.350556 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 528

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Lead	12128	1		1/6	NBR	COM	001	ug/m^3	803	Atomic Absorption
$PM_{2.5}$ FRM	88101	1		x1/3	NBR	COM	105	ug/m^3	118	R&P 2025 Sequential

Ladue

AQS Site Number 29-189-3001

55 Hunter Avenue, Clayton, MO,

Latitude: 38.641389 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.345833 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 528

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Sulfur Dioxide	42401	1		H	NBR	COM	007	ppm	039	Ultra-violet stimulated
$PM_{2.5}$ AQI/Speciation	88502	3		H	NBR	AQI	105	ug/m^3	760	$PM_{2.5}$ SCC
Nitrogen Dioxide	42602	1		H	URB	COM	007	ppm	074	Chemiluminescence
Resultant Wind Speed	61103	1		H	NBR	MET	012	mph	020	Vector Summation
Resultant Wind Direct	61104	1		H	NBR	MET	014	deg	020	Vector Summation
Outdoor Temperature	62101	1		H	NBR	MET	015	deg F	040	Electronic Averaging
$PM_{2.5}$ Tot Atmospheric	88500	3		H	NBR	AQI	105	ug/m^3	760	$PM_{2.5}$ SCC FDMS

Maryland Heights

AQS Site Number 29-189-0014

13044 Marine Avenue, Maryland Hgts, MO,

Latitude: 38.7109 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.4759 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 633

Maryland Heights *AQS Site Number* 29-189-0014

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Resultant Wind Speed	61103	1		H	NBR	MET	012	mph	020	Vector Summation
Resultant Wind Direct	61104	1		H	NBR	MET	014	deg	020	Vector Summation
Ozone	44201	1		H	NBR	COM	007	ppm	087	Ultra-violet Absorption
Nitrogen Dioxide	42602	1		H	URB	COM	007	ppm	074	Chemiluminescence
Sulfur Dioxide	42401	1		H	NBR	COM	007	ppm	039	Ultra-violet stimulated
Outdoor Temperature	62101	1		H	NBR	MET	015	deg F	040	Electronic Averaging

Oakville *AQS Site Number* 29-189-0015

Baumgartner Road

Latitude: 00.000000 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -00.000000 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 000

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
PM_{10}	81102	3		H	MID	COM	001	ug/m^3	079	R&P SA246B TEOM

Pacific *AQS Site Number* 29-189-0005

18701 Old Highway 66, Pacific, MO,

Latitude: 38.4902 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.7052 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 524

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Resultant Wind Speed	61103	1		H	NBR	MET	012	mph	020	Vector Summation
Resultant Wind Direct	61104	1		H	NBR	MET	014	deg	020	Vector Summation
Ozone	44201	1		H	NBR	COM	007	ppm	087	Ultra-violet Absorption

Sunset Hills *AQS Site Number* 29-189-0004

4580 South Lindbergh, Sunset Hills, MO,

Latitude: 38.5325 ***AQCR:*** 070 Metropolitan St. Louis

Longitude: -90.382778 ***MSA:*** 7040 St. Louis, MO-IL

Elevation: 600

Pollutant	*AQS Code*	*PO*	*Col*	*Freq*	*Scale*	*Obj*	*Unit*		*Method*	
Resultant Wind Speed	61103	1		H	NBR	MET	012	mph	020	Vector Summation
Nitrogen Dioxide	42602	1		H	URB	COM	007	ppm	074	Chemiluminescence
Resultant Wind Direct	61104	1		H	NBR	MET	014	deg	020	Vector Summation
Outdoor Temperature	62101	1		H	NBR	MET	015	deg F	040	Electronic Averaging
Carbon Monoxide	42101	1		H	MID	COM	007	ppm	054	Non-dispersive Infrared